NEW

Variable Capacity Chiller

Smooth Transitions from 12,000 to 48,000 BTUs As Needed



Key Benefits

- Variable capacity from 1 to 4 tons as thermal load changes
- Compact footprint
- Operates steadily at lower speeds to provide maximum efficiency
- Select from 3 user-adjustable amp limits: Econo, Standard, or Boost
- Electronic expansion valve for precise control of superheat
- Easy, flexible plumbing configurations with less depth needed

Special Options

- High-resolution, interactive touchscreen display
- Dometic STIIC software provides interactive management via smart phone, tablet, or computer
- Dometic STIIC software provides secure access from Dometic global technical support

Maximize chiller efficiency and reduce electrical load fluctuations with Dometic's innovative Variable Capacity Chiller (VARC48). At full speed, the VARC48 provides a nominal four tons of cooling or heating. It also has the ability to modulate its speed all the way down to one ton in order to precisely match demand.

Other chillers use a basic all-on or all-off method for water-loop temperature control, continuously starting and stopping which greatly changes the load on the generator. By precisely balancing output to load, the swing (hysteresis) in loop water temperature is minimized. The VARC48 uses a precision PID (proportional integral derivative) loop control algorithm that modulates the compressor speed and balances chiller output with required load. This smooth operation eliminates large swings in current on the generator.

The VARC48 uses the advanced technology of an Electronic Expansion Valve (EEV). This provides more precise control of superheat across a broad range of conditions with no erratic swings as the valve reacts to temperature and pressure changes (no "hunting"). Using an advanced algorithm, superior superheat control is maintained over extreme operating conditions.

The innovative design of plumbing connections improves ease of installation and maintenance. All connections come straight out of the unit to simplify the manifold and minimize the final installation depth while also presenting clean and professional plumbing connections. The water connections are all parallel, but no two are in the same horizontal or vertical plane, which make the manifold very simple. Whether horizontal or vertical, the manifolds can be in the same plane and need not cross.

An optional high-resolution color touchscreen provides a dynamic interface and improved system metrics and control. Access detailed, complex system information from a single location and interact accordingly.



Built-in variable frequency drive.



Integrated digital chiller control/display.



Electronic expansion valve for precise control of superheat.

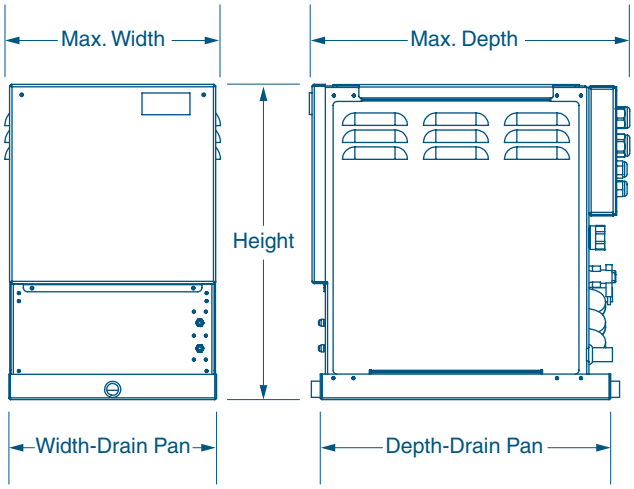
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Specifications for Variable Capacity Chiller

Model	VARC48
Capacity (BTU/h)	48,000
Voltage/Cycle/Ph	208-230V/50 or 60Hz/1 Ph
Full Load Amps (FLA) Cool [1]	15.9
Full Load Amps (FLA) Heat [1]	17.0
Seawater Connection	7/8 in OD tube
Chilled Water Connection	1 in. NPT
Drain Connection	1/2 in. NPT
Seawater Pressure Drop @ 12 GPM	6.5 PSI
Chilled Water Pressure Drop @ 12 GPM	11.8 PSI
Height (in/mm) [2]	19.7/501
Max. Width (in/mm) [2]	13.5/343
Width-Drain Pan (in/mm) [2]	13.0/330
Max. Depth (in/mm) [2]	20.0/509
Depth-Drain Pan (in/mm) [2]	18.2/462
Gross Weight (lbs/kg)	178/80.7

[1] At full speed and 230V/50 or 60Hz/1-phase input power.
[2] All dimensions ± 0.25 in. (6 mm).

Dimensions



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Dealer

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Specifications and availability subject to change without notice.

Assembled in the USA

Environmentally Responsible